```
EEEEEEEEEEEEEEEE  DDDDDDDDDD       TTTTTTTTTTTTTTTT
EEEEEEEEEEEEEEEEE  DDDDDDDDDD      TTTTTTTTTTTTTTTT
EEEEEEEEEEEEEEEEE  DDDDDDDDDD      TTTTTTTTTTTTTTTT
EEE                DDD      DDD          TTT
EEE                DDD      DDD          TTT
EEE                DDD      DDD          TTT
EEE                DDD      DDD          TTT
EEE                DDD      DDD          TTT
EEEEEEEEEEEE       DDD      DDD          TTT
EEEEEEEEEEEE       DDD      DDD          TTT
EEEEEEEEEEEE       DDD      DDD          TTT
EEE                DDD      DDD          TTT
EEE                DDD      DDD          TTT
EEE                DDD      DDD          TTT
EEE                DDD      DDD          TTT
EEE                DDD      DDD          TTT
EEEEEEEEEEEEEEEE  DDDDDDDDDD             TTT
EEEEEEEEEEEEEEEE  DDDDDDDDDD             TTT
EEEEEEEEEEEEEEEE  DDDDDDDDDD             TTT
```

EXE

Mod

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ED
SYS
LBR
LIE

```
WW      WW  FFFFFFFFF  RRRRRRR    EEEEEEEEEE   AAAAAA    BBBBBBBB     CCCCCCCC   KK       KK
WW      WW  FFFFFFFFF  RRRRRRR    EEEEEEEEEE   AAAAAA    BBBBBBBB     CCCCCCCC   KK       KK
WW      WW  FF         RR    RR   EE          AA    AA   BB    BB    CC          KK     KK
WW      WW  FF         RR    RR   EE          AA    AA   BB    BB    CC          KK   KK
WW      WW  FF         RR    RR   EE          AA    AA   BB    BB    CC          KK KK
WW      WW  FFFFFFF    RRRRRRR    EEEEEEE     AA    AA   BBBBBBBB    CC          KKKKK
WW      WW  FFFFFFF    RRRRRRR    EEEEEEE     AA    AA   BBBBBBBB    CC          KKKKK
WW  WW  WW  FF         RR  RR     EE          AAAAAAAAAA BB    BB    CC          KK  KK
WW  WW  WW  FF         RR  RR     EE          AAAAAAAAAA BB    BB    CC          KK  KK
WWWW  WWWW  FF         RR    RR   EE          AA    AA   BB    BB    CC          KK       KK
WWWW  WWWW  FF         RR    RR   EE          AA    AA   BB    BB    CC          KK       KK   ....
WW      WW  FF         RR    RR   EEEEEEEEEE  AA    AA   BBBBBBBB     CCCCCCC    KK       KK   ....
WW      WW  FF         RR    RR   EEEEEEEEEE  AA    AA   BBBBBBBB     CCCCCCC    KK       KK   ....


LL           IIIIII    SSSSSSSS
LL           IIIIII    SSSSSSSS
LL             II     SS
LL             II     SS
LL             II     SS
LL             II       SSSSSS
LL             II       SSSSSS
LL             II           SS
LL             II           SS
LL             II           SS
LL             II           SS
LLLLLLLLLL   IIIIII    SSSSSSSS
LLLLLLLLLL   IIIIII    SSSSSSSS
```

```
0001  0  %TITLE 'EDT$WFREABCK - read previous line'
0002  0  MODULE EDT$WFREABCK (                         ! Read previous line
0003  0                  IDENT = 'V04-000'             ! File: WFREABCK.BLI Edit: TSS1005
0004  0                  ) =
0005  1  BEGIN
0006  1
0007  1  !*****************************************************************
0008  1  !*                                                             *
0009  1  !*  COPYRIGHT (c) 1978, 1980, 1982, 1984 BY                    *
0010  1  !*  DIGITAL EQUIPMENT CORPORATION, MAYNARD, MASSACHUSETTS.     *
0011  1  !*  ALL RIGHTS RESERVED.                                       *
0012  1  !*                                                             *
0013  1  !*  THIS SOFTWARE IS FURNISHED UNDER A LICENSE AND MAY BE USED AND COPIED  *
0014  1  !*  ONLY IN  ACCORDANCE WITH  THE  TERMS  OF  SUCH  LICENSE  AND WITH THE  *
0015  1  !*  INCLUSION OF THE ABOVE COPYRIGHT NOTICE. THIS SOFTWARE OR  ANY  OTHER  *
0016  1  !*  COPIES THEREOF MAY NOT BE PROVIDED OR OTHERWISE MADE AVAILABLE TO ANY  *
0017  1  !*  OTHER PERSON.  NO TITLE TO AND OWNERSHIP OF  THE  SOFTWARE IS  HEREBY  *
0018  1  !*  TRANSFERRED.                                               *
0019  1  !*                                                             *
0020  1  !*  THE INFORMATION IN THIS SOFTWARE IS  SUBJECT TO CHANGE WITHOUT NOTICE  *
0021  1  !*  AND  SHOULD  NOT  BE  CONSTRUED AS  A COMMITMENT BY DIGITAL EQUIPMENT  *
0022  1  !*  CORPORATION.                                               *
0023  1  !*                                                             *
0024  1  !*  DIGITAL ASSUMES NO RESPONSIBILITY FOR THE USE  OR  RELIABILITY OF ITS  *
0025  1  !*  SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL.    *
0026  1  !*                                                             *
0027  1  !*                                                             *
0028  1  !*****************************************************************
0029  1  !
0030  1  !
0031  1  !++
0032  1  ! FACILITY:     EDT -- The DEC Standard Editor
0033  1  !
0034  1  ! ABSTRACT:
0035  1  !
0036  1  !     Read the previous line from the work file system.
0037  1  !
0038  1  ! ENVIRONMENT:  Runs at any access mode - AST reentrant
0039  1  !
0040  1  ! AUTHOR: Bob Kushlis, CREATION DATE: October 16, 1978
0041  1  !
0042  1  ! MODIFIED BY:
0043  1  !
0044  1  ! 1-001 - Original.  DJS 23-Feb-1981.  This module was created by
0045  1  !         extracting routine EDT$$RD_PRVLN  from module EDTWF.
0046  1  ! 1-002 - regularize headers.  JBS 19-Mar-1981
0047  1  ! 1-003 - Change index for line numbers from 10 to 15.  SMB 18-Jan-1982
0048  1  ! 1-004 - Remove EDT$$SET_WKLN.  JBS 14-Sep-1982
0049  1  ! 1-005 - Modify to use new 48 bit macro. STS 01-Oct-1982
0050  1  !--
0051  1
```

```
 53    0052  1  %SBTTL 'Declarations'
 54    0053  1  !
 55    0054  1  ! TABLE OF CONTENTS:
 56    0055  1  !
 57    0056  1
 58    0057  1  REQUIRE 'EDTSRC:TRAROUNAM';
 59    0496  1
 60    0497  1  FORWARD ROUTINE
 61    0498  1      EDT$$RD_PRVLN;
 62    0499  1
 63    0500  1  !
 64    0501  1  ! INCLUDE FILES:
 65    0502  1  !
 66    0503  1
 67    0504  1  REQUIRE 'EDTSRC:EDTREQ';
 68    0639  1
 69    0640  1  !
 70    0641  1  ! MACROS:
 71    0642  1  !
 72    0643  1  !     NONE
 73    0644  1  !
 74    0645  1  ! EQUATED SYMBOLS:
 75    0646  1  !
 76    0647  1  !     NONE
 77    0648  1  !
 78    0649  1  ! OWN STORAGE:
 79    0650  1  !
 80    0651  1  !     NONE
 81    0652  1  !
 82    0653  1  ! EXTERNAL REFERENCES:
 83    0654  1  !
 84    0655  1  !     In the routine
```

```
   86   0656  1   %SBTTL 'EDT$$RD_PRVLN - read previous line'
   87   0657  1
   88   0658  1   GLOBAL ROUTINE EDT$$RD_PRVLN                        ! Read previous line
   89   0659  1       =
   90   0660  1
   91   0661  1   !++
   92   0662  1   !  FUNCTIONAL DESCRIPTION:
   93   0663  1   !
   94   0664  1   !      Read a line backwards.  The line preceding the current line becomes the
   95   0665  1   !      current line.  If we are already at the top, return a 0 otherwise return
   96   0666  1   !      a 1.
   97   0667  1   !
   98   0668  1   !  FORMAL PARAMETERS:
   99   0669  1   !
  100   0670  1   !      NONE
  101   0671  1   !
  102   0672  1   !  IMPLICIT INPUTS:
  103   0673  1   !
  104   0674  1   !      EDT$$A_CUR_BUF
  105   0675  1   !      EDT$$A_WK_BUK
  106   0676  1   !      EDT$$G_WK_CURBUK
  107   0677  1   !      EDT$$L_LN00
  108   0678  1   !
  109   0679  1   !  IMPLICIT OUTPUTS:
  110   0680  1   !
  111   0681  1   !      EDT$$A_CUR_BUF
  112   0682  1   !      EDT$$A_WK_LN
  113   0683  1   !
  114   0684  1   !  ROUTINE VALUE:
  115   0685  1   !
  116   0686  1   !      1 = previous line read successfully
  117   0687  1   !      0 = there is no previous line
  118   0688  1   !
  119   0689  1   !  SIDE EFFECTS:
  120   0690  1   !
  121   0691  1   !      NONE
  122   0692  1   !
  123   0693  1   !--
  124   0694  1
  125   0695  2       BEGIN
  126   0696  2
  127   0697  2       EXTERNAL ROUTINE
  128   0698  2           EDT$$WF_MAKECUR : NOVALUE;
  129   0699  2
  130   0700  2       EXTERNAL
  131   0701  2           EDT$$A_CUR_BUF : REF TBCB_BLOCK,            ! Current text buffer control block
  132   0702  2           EDT$$A_WK_BUK :                            ! Pointer to current bucket
  133   0703  2               REF BLOCK [WF_BUKT_SIZE, BYTE] FIELD (WFB_FIELDS),
  134   0704  2           EDT$$G_WK_CURBUK,                          ! Number of the current bucket
  135   0705  2           EDT$$L_LN00 : LNOVECTOR [14],
  136   0706  2           EDT$$A_WK_LN : REF LIN_BLOCK;              ! Pointer to work line
  137   0707  2
  138   0708  2       EDT$$A_CUR_BUF [TBCB_CHAR_POS] = 0;
  139   0709  2   !+
  140   0710  2   ! See if we are at the beginning of a bucket.
  141   0711  2   !-
  142   0712  2
```

EDT$WFREABCK   EDT$WFREABCK - read previous line   M 11
16-Sep-1984 02:10:18   VAX-11 Bliss-32 V4.0-742   Page 4
V04-000   EDT$$RD_PRVLN - read previous line   14-Sep-1984 12:25:39   DISK$VMSMASTER:[EDT.SRC]WFREABCK.BLI;1   (3)

```
: 143    0713  3        IF (.EDT$$A_CUR_BUF [TBCB_LINE_ADDR] EQL WFB_FIXED_SIZE)
: 144    0714  3        THEN
: 145    0715
: 146    0716              IF (.EDT$$A_WK_BUK [WFB_PREV_BUKT] EQL 0)
: 147    0717              THEN
: 148    0718                 RETURN (0)                          ! cannot read backward at beginning of buffer.
: 149    0719              ELSE
: 150    0720                 BEGIN
: 151    0721           !+
: 152    0722           ! Read the previous bucket and position to ic's end.
: 153    0723           !-
: 154    0724                 EDT$$WF_MAKECUR (.EDT$$A_WK_BUK [WFB_PREV_BUKT]);
: 155    0725                 EDT$$A_CUR_BUF [TBCB_LINE_ADDR] = .EDT$$A_WK_BUK [WFB_END];
: 156    0726                 EDT$$A_CUR_BUF [TBCB_CUR_BUKT] = .EDT$$G_WK_CURBUK;
: 157    0727                 END;
: 158    0728           !+
: 159    0729           ! Now, move back a line.
: 160    0730  2        !-
: 161    0731
: 162    0732  2        EDT$$A_CUR_BUF [TBCB_LINE_ADDR] = .EDT$$A_CUR_BUF [TBCB_LINE_ADDR] -  !
: 163    0733           CH$RCHAR (CH$PTR (.EDT$$A_WK_BUK, .EDT$$A_CUR_BUF [TBCB_LINE_ADDR] - 1)) -  !
: 164    0734           LIN_FIXED_SIZE - 1;
: 165    0735           SUBLINE (NUMBER_ONE, EDT$$A_CUR_BUF [TBCB_CUR_LIN]);
: 166    0736           !+
: 167    0737  2        ! Get the address of the current line.
: 168    0738           !-
: 169    0739           EDT$$A_WK_LN = CH$PTR (.EDT$$A_WK_BUK, .EDT$$A_CUR_BUF [TBCB_LINE_ADDR]);
: 170    0740           RETURN (1);
: 171    0741  1        END;                                    ! of routine EDT$$RD_PRVLN
```

```
                                      .TITLE  EDT$WFREABCK EDT$WFREABCK - read previous line
                                      .IDENT  \V04-000\

                                      .EXTRN  EDT$$WF_MAKECUR
                                      .EXTRN  EDT$$A_CUR_BUF, EDT$$A_WK_BUK
                                      .EXTRN  EDT$$G_WK_CURBUK
                                      .EXTRN  EDT$$L_LN00, EDT$$A_WK_LN

                                      .PSECT  _EDT$CODE,NOWRT,  SHR,  PIC,2

                              001C 00000    .ENTRY  EDT$$RD_PRVLN, Save R2,R3,R4          ; 0658
          54 00000000G  00  9E 00002    MOVAB   EDT$$A_CUR_BUF, R4
          53 00000000G  00  9E 00009    MOVAB   EDT$$A_WK_BUK, R3
          50            64  D0 00010    MOVL    EDT$$A_CUR_BUF, R0                        ; 0708
                    0C  A0  B4 00013    CLRW    12(R0)
                    08  60  D1 00016    CMPL    (R0), #8                                 ; 0713
                        23  12 00019    BNEQ    1$
          50            63  D0 0001B    MOVL    EDT$$A_WK_BUK, R0                         ; 0716
                        60  B5 0001E    TSTW    (R0)
                        4E  13 00020    BEQL    3$
                    7E  60  3C 00022    MOVZWL  (R0), -(SP)                              ; 0724
  00000000G  00      01  FB 00025    CALLS   #1, EDT$$WF_MAKECUR
                    51  64  D0 0002C    MOVL    EDT$$A_CUR_BUF, R1                        ; 0725
                    50  63  D0 0002F    MOVL    EDT$$A_WK_BUK, R0
              61     04  A0  D0 00032    MOVL    4(R0), -(R1)
          04  A1 00000000G  00  B0 00036    MOVW    EDT$$G_WK_CURBUK, 4(R1)              ; 0726
```

EDT$WFREABCK   EDT$WFREABCK - read previous line   I 11
V04-000   EDT$SRD_PRVLN - read previous line   16-Sep-1984 02:10:18   VAX-11 Bliss-32 V4.0-742   Page 5
                                                             14-Sep-1984 12:25:39   DISK$VMSMASTER:[EDT.SRC]WFREABCK.BLI;1 (3)

```
                        50          64  D0 0003E 1$:    MOVL    EDT$$A_CUR_BUF, R0                    ; 0732
                        52          63  D0 00041         MOVL    EDT$$A_WK_BUK, R2                    ; 0733
              51        52          60  C1 00044         ADDL3   (R0), R2, R1
                        51      FF  A1  9A 00048         MOVZBL  -1(R1), R1
              51        60          51  C3 0004C         SUBL3   R1, (R0), R1
                        60      F8  A1  9E 00050         MOVAB   -8(R1), (R0)                         ; 0734
                        51      06  A0  D0 00054         MOVL    6(R0), SAVE                          ; 0735
                                06  A0  D7 00058         DECL    6(R0)
                        51      06  A0  D1 0005B         CMPL    6(R0), SAVE
                                03      1B 0005F         BLEQU   2$
                                0A  A0  B7 00061         DECW    10(R0)
     00000000G  00      52          60  C1 00064 2$:    ADDL3   (R0), R2, EDT$$A_WK_LN               ; 0739
                        50          01  D0 0006C         MOVL    #1, R0                               ; 0740
                                04      00006F          RET
                        50          50  D4 00070 3$:    CLRL    R0                                    ; 0741
                                04      00072          RET
```

; Routine Size: 115 bytes,   Routine Base: _EDT$CODE + 0000

; 172   0742 1
; 173   0743 1 !<BLF/PAGE>

```
; 175          0744 1 END                                      ! of module EDT$WFREABCK
; 176          0745 1
; 177          0746 0 ELUDOM
```

```
;
;                               PSECT SUMMARY
;
;       Name                    Bytes                       Attributes
;
; _EDT$CODE                      115 NOVEC,NOWRT, RD , EXE, SHR, LCL, REL, CON, PIC,ALIGN(2)
```

```
;
;                               Library Statistics
;
;                                      -------- Symbols --------    Pages      Processing
;       File                            Total   Loaded   Percent   Mapped       Time
;
; _$255$DUA28:[EDT.SRC]EDT.L32;1          377      42       11        40       00:00.2
; _$255$DUA28:[EDT.SRC]PSECTS.L32;1         2       1       50         7       00:00.1
```

```
;
;                               COMMAND QUALIFIERS
;
;       BLISS/CHECK=(FIELD,INITIAL,OPTIMIZE)/NOTRACEBACK/LIS=LIS$:WFREABCK/OBJ=OBJ$:WFREABCK MSRC$:WFREABCK.BLI/UPDATE=(ENH$:WFRE
;       ABCK)
```

```
; Size:           115 code + 0 data bytes
; Run Time:       00:12.5
; Elapsed Time:   00:16.9
; Lines/CPU Min:    3589
; Lexemes/CPU-Min: 12880
; Memory Used:  85 pages
; Compilation Complete
```

VMSMSG
LIS

WFCOPLIN
LIS

USSTRING
LIS

WFSCOPY
LIS

WFDELLIN
LIS

WFGETBKT
LIS

WFOPNBUF
LIS

WFREABCK
LIS

WFREAFWD
LIS

WFSTRINS
LIS

WFAPPBKT
LIS

WFENDLNS
LIS

WFRESSEQ
LIS

UGBUFFER
LIS

WFCLEAR
LIS

USSUBS
LIS

WFDELBKT
LIS

WFSPLBKT
LIS

WFLOCLIN
LIS

WFRBUKT
LIS

WFINSLIN
LIS

WFREACUR
LIS

WFREAINP
LIS

WFTOP
LIS

WFREPLIN
LIS

WFBOTTOM
LIS

WFECOPY
LIS